



EAST KENTUCKY POWER COOPERATIVE

April 27, 2006

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

RECEIVED

APR 27 2006

PUBLIC SERVICE
COMMISSION

Re: Administrative Case No. 2006-00045

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case an original and seven (7) copies of the responses of East Kentucky Power Cooperative, Inc. and its Member Systems to the Commission Staff's Second Information Request, dated April 13, 2006, and the Request for Information of Metro Human Needs Alliance, dated April 12, 2006.

Very truly yours,

A handwritten signature in cursive script that reads "Charles A. Lile".

Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record

RECEIVED

APR 27 2006

**PUBLIC SERVICE
COMMISSION**

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

CONSIDERATION OF THE)	
REQUIREMENTS OF THE FEDERAL)	
ENERGY POLICY ACT OF 2005)	
REGARDING TIME-BASED METERING,)	ADMINISTRATIVE
DEMAND RESPONSE AND)	CASE NO. 2006-00045
INTERCONNECTION SERVICE)	

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS**

PSC ADMINISTRATIVE CASE 2006-00045

COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06

East Kentucky Power Cooperative, Inc. (EKPC) and its Member Systems hereby submit responses to the Commission Staff's Second Information Request dated April 13, 2006. Each response with its associated supportive reference material is individually tabbed.

The Member Systems are:

Big Sandy Rural Electric Cooperative Corporation
Blue Grass Energy Cooperative Corporation
Clark Energy Cooperative, Inc.
Cumberland Valley Electric
Farmers Rural Electric Cooperative Corporation
Fleming-Mason Energy Cooperative
Grayson Rural Electric Cooperative Corporation
Inter-County Energy Cooperative Corporation
Jackson Energy Cooperative
Licking Valley Rural Electric Cooperative Corporation
Nolin Rural Electric Cooperative Corporation
Owen Electric Cooperative
Salt River Electric Cooperative Corporation
Shelby Energy Cooperative, Inc.
South Kentucky Rural Electric Cooperative Corporation
Taylor County Rural Electric Cooperative Corporation

TAB 8

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 8**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 8. Refer to East Kentucky's response to Item 1 of the "Smart Metering" requests in the Commission's February 24, 2006 Order. Identify the Member Systems that have implemented each of the rates under I. Time-of-Day Rate Options (pages 2-5 of 10) and II. Demand-Side Management Options (pages 5-10 of 10).

Response 8.

I. Time-of-Day Rate Options

- **Large Commercial and Industrial Time-of-Day Rates**
 - Large Commercial
 - Clark Energy Cooperative, Inc.
 - Jackson Energy Cooperative
 - Owen Electric Cooperative
 - Shelby Energy Cooperative, Inc.
 - Industrial
 - Big Sandy Rural Electric Cooperative Corporation

- Blue Grass Energy Cooperative Corporation
 - Clark Energy Cooperative, Inc.
 - Cumberland Valley Electric
 - Farmers Rural Electric Cooperative Corporation
 - Fleming-Mason Energy Cooperative
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - Nolin Rural Electric Cooperative Corporation
 - Owen Electric Cooperative
 - Salt River Electric Cooperative Corporation
 - Shelby Energy Cooperative, Inc.
 - South Kentucky Rural Electric Cooperative Corporation
 - Taylor County Rural Electric Cooperative Corporation
-
- **Interruptible Rates**
 - Interruptible
 - Blue Grass Energy Cooperative Corporation
 - Fleming-Mason Energy Cooperative
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - Nolin Rural Electric Cooperative Corporation
 - Owen Electric Cooperative
 - Salt River Electric Cooperative Corporation
 - Shelby Energy Cooperative, Inc.
 - South Kentucky Rural Electric Cooperative Corporation

- Voluntary Interruptible
 - Blue Grass Energy Cooperative Corporation
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Owen Electric Cooperative
 - Shelby Energy Cooperative, Inc.

- **Special Contract Rates**
 - Owen Electric's/EKPC special contract rates with Gallatin Steel; Taylor County RECC and Fleming-Mason /EKPC special contract with Tennessee Gas Pipeline (TGP)

- **Electric Thermal Storage (ETS) - Residential**
 - Blue Grass Energy Cooperative Corporation
 - Clark Energy Cooperative, Inc.
 - Cumberland Valley Electric
 - Farmers Rural Electric Cooperative Corporation
 - Fleming-Mason Energy Cooperative
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - Owen Electric Cooperative
 - Salt River Electric Cooperative Corporation
 - Shelby Energy Cooperative, Inc.
 - South Kentucky Rural Electric Cooperative Corporation
 - Taylor County Rural Electric Cooperative Corporation

- **Experimental Time-of-Day and Time-of-Day Rates Research Project for Residential (Tariffs remain in place but experiment concluded in 1980's.)**
 - Big Sandy Rural Electric Cooperative Corporation
 - Blue Grass Energy Cooperative Corporation
 - Clark Energy Cooperative, Inc.
 - Cumberland Valley Electric
 - Grayson Rural Electric Cooperative Corporation
 - Jackson Energy Cooperative
 - Owen Electric Cooperative
 - Salt River Electric Cooperative Corporation
 - Taylor County Rural Electric Cooperative Corporation

II. Demand-Side Management Options

- **Tune-Up HVAC Maintenance Program**
 - Blue Grass Energy Cooperative Corporation
 - Cumberland Valley Electric
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - South Kentucky Rural Electric Cooperative Corporation

- **Geothermal Heating & Cooling Incentive Program**
 - Big Sandy Rural Electric Cooperative
 - Blue Grass Energy Cooperative Corporation
 - Clark Energy Cooperative, Inc.
 - Cumberland Valley Electric

- Farmers Rural Electric Cooperative Corporation
 - Fleming-Mason Energy Cooperative
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - Nolin Rural Electric Cooperative Corporation
 - Owen Electric Cooperative
 - Salt River Electric Cooperative Corporation
 - Shelby Energy Cooperative, Inc.
 - South Kentucky Rural Electric Cooperative Corporation
 - Taylor County Rural Electric Cooperative Corporation
-
- **Electric Thermal Storage Incentive Program**
 - Clark Energy Cooperative, Inc.
 - Cumberland Valley Electric
 - Fleming-Mason Energy Cooperative
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - Salt River Electric Cooperative Corporation
 - South Kentucky Rural Electric Cooperative Corporation
 - Taylor County Rural Electric Cooperative Corporation
-
- **Electric Water Heater Incentive Program**
 - Big Sandy Rural Electric Cooperative Corporation
 - Blue Grass Energy Cooperative Corporation
 - Clark Energy Cooperative, Inc.
 - Cumberland Valley Electric

- Grayson Rural Electric Cooperative Corporation
- Inter-County Energy Cooperative Corporation
- Jackson Energy Cooperative
- Nolin Rural Electric Cooperative Corporation
- Owen Electric Cooperative
- Salt River Electric Cooperative Corporation
- Shelby Energy Cooperative, Inc.
- South Kentucky Rural Electric Cooperative Corporation
- Taylor County Rural Electric Cooperative Corporation

- **Air-Source Heat Pump Incentive Program**

- Big Sandy Rural Electric Cooperative Corporation
- Blue Grass Energy Cooperative Corporation
- Clark Energy Cooperative, Inc.
- Cumberland Valley Electric
- Grayson Rural Electric Cooperative Corporation
- Inter-County Energy Cooperative Corporation
- Jackson Energy Cooperative
- Nolin Rural Electric Cooperative Corporation
- Owen Electric Cooperative
- Salt River Electric Cooperative Corporation
- Shelby Energy Cooperative, Inc.
- South Kentucky Rural Electric Cooperative Corporation
- Taylor County Rural Electric Cooperative Corporation

- **Button-Up Weatherization Program**

- Blue Grass Energy Cooperative Corporation
- Clark Energy Cooperative, Inc.

- Cumberland Valley Electric
 - Farmers Rural Electric Cooperative Corporation
 - Fleming-Mason Energy Cooperative
 - Grayson Rural Electric Cooperative Corporation
 - Inter-County Energy Cooperative Corporation
 - Jackson Energy Cooperative
 - Nolin Rural Electric Cooperative Corporation
 - Salt River Electric Cooperative Corporation
 - Shelby Energy Cooperative, Inc.
 - South Kentucky Rural Electric Cooperative Corporation
 - Taylor County Rural Electric Cooperative Corporation
- **Touchstone Energy Manufactured Home Program**
 - EKPC program available to all Member Systems.
 - **Touchstone Energy Home Program**
 - EKPC program available to all Member Systems.
 - **Direct Load Control of Air Conditioners and Water Heaters**
 - Approved for Big Sandy RECC and Blue Grass Energy on April 18, 2006.
 - **Commercial and Industrial Energy Services**
 - EKPC service for all Member Systems.

While not explicitly cited in the response to the Commission Staff's first data request, all Member Systems conduct residential home energy audits at no charge.

TAB 9

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 9**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 9. Refer to page 5 of 10 of the response to Item 1 of the “Smart Metering” requests in the Commission’s February 24, 2006 Order. Describe the specific nature of the time-of-day rate and research experimental project, the costs associated with it, and the reason it was not continued beyond 1986-1987.

Response 9. In September 1983, the Company filed for approval of a time-of-day rate experiment and a load research project. Both projects were run concurrently and EKPC was able to use customers from the load research group for the time-of-day experiment, thus reducing the cost of the time-of-day project. A total of 144 residential customers from 17 Member Systems would be subject to time-differentiated rates. The off-peak rate was based on a 40 percent discount.

With regard to costs, the Company’s Application in the case cited a total cost of about \$263,000 from a request made for a similar project in Case 8648, the prior EKPC general rate case. By coupling the time-of-day rate experiment with implementing a load research program, it was estimated that \$93,000 of metering costs would be saved, resulting in a net estimated cost of about \$170,000.

The Company did not file for a permanent time-of-day rate following the collection of data from the experiment.

TAB 10

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 10**

RESPONSIBLE PERSON: William A. Bosta/Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 10. Refer to the March 23, 2006 response A-2 of LG&E and KU to Item 2 of the "Smart Metering" requests, which refers to simple seasonal rates, and to the first bullet under Residential and Small Commercial of the same response. Do East Kentucky and its Member Systems share the same view regarding simple seasonal rates? Explain the response.

Response 10. Yes. While seasonal rates may offer the possibility of reducing customer demand and may be less costly to implement, the seasonal rate differential must be cost justified. Although EKPC has historically been a winter peaking utility, the summer peak has increased to the point where it is a significant factor in the resource planning process. As a result, it is unlikely that EKPC could cost justify a significant difference in seasonal rates.

TAB 11

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 11**

RESPONSIBLE PERSON: William A. Bosta/Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 11. Refer to page 5 of 5 of the response to Item 4 of the “Smart Metering” requests in the Commission’s February 24, 2006 Order. The last recommendation of East Kentucky and its Member Systems to the Commission is, “Encourage, but do not mandate, utilities to offer time-of-day rates to residential customers.” Other utilities, in their data responses, suggest that the Commission should consider experimental pilot programs regarding time-of-day rates for residential customers. Are East Kentucky and its Member Systems opposed to such programs? Explain the response.

Response 11. East Kentucky and its Member Systems do not necessarily oppose instituting an experimental pilot program. However, as shown in our response to Item 3, Smart Metering, of the Commission Staff’s first data request the cost of instituting time-of-day rates for residential customers is significant and any pilot program must be structured to limit the costs while obtaining the necessary data to properly evaluate the need to make it permanent. In that regard, East Kentucky and its Member Systems offer the following suggestions.

- One, in light of the need to have participants pay the incremental cost of the time-of-day metering costs, thus limiting potential cost savings, along with the low residential rates in Kentucky, it is recommended that the Commission authorize a comprehensive survey to gauge customer interest in residential time-of-day rates. The survey would point out the likely level of cost savings at various consumption levels as well as the possibility of additional costs in the event that load shifting does not occur.
- Two, in the event that there is sufficient interest to go forward with a pilot, East Kentucky and its Member Systems suggest a statewide program where various utilities demonstrate and utilize selected technologies.
- Three, as a follow-on to the second suggestion, if the Commission finds it necessary to establish a pilot project, East Kentucky and its Member Systems would recommend that time-of-day rates be offered only to those Member Systems that use the Hunt Technologies TS2 automatic meter reading systems. This system is ready to use time-of-day rates and would be a least cost alternative for EKPC and its Member Systems. Those utilities that do not have automated meter reading systems could demonstrate and utilize a manual reading approach using a limited sample size of customers. Collectively, this approach would be the most cost-effective alternative because it would allow utilities to utilize the existing meter reading technology.

TAB 12

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 12**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 12. Provide a brief discussion relative to the DSM programs of East Kentucky's Member Systems and explain if and how potential demand response resources are considered in your integrated resource planning process.

Response 12. The demand response programs cited on pages 5 through 10 of the response to PSC Request 1, Smart Metering, of the Commission Staff's first data request are taken into account in the development of the load forecast used in the IRP. EKPC's load forecast for each Member System recognizes historic trends in demand and energy consumption by customer class. To the extent that customers have participated in these programs, the customer class data used to develop the forecast will reflect such participation. In turn, the supply/resource portfolio contains a provision for the continued use of these programs. In addition, the effect on demand and energy consumption of interruptible rates and special contracts is also considered in the process.

TAB 13

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 13**

RESPONSIBLE PERSON: Paul A. Dolloff
**COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems**

Request 13. Refer to the response to Item 3 of the “Interconnection” requests in the Commission’s February 24, 2006 Order. Refer also to the response of LG&E and KU to the same Commission request, which refers to customers with “open transition” switched generation that operates separately from the distribution grid.

Request 13a. Do East Kentucky and its Member Systems require customers to obtain their authorization to have such “open transition” switched generation arrangements for operational purposes? Explain the response.

Response 13a. After reviewing LG&E and KU’s response, East Kentucky and its Member Systems understand “open transition” to mean a customer owned and operated backup generating system. This type of interconnection is more correctly referred to as a “make before break” scheme. This means, that once the customer’s switchgear detects a disturbance on the utility’s grid, the backup generating system starts and a sectionalizing device is operated such that the customer becomes isolated from the utility grid. This transitional scheme is designed to minimize a customer’s outage time. In our initial response to the KY PSC, East Kentucky and the Member Systems did not

consider these types of customer owned generating systems to be “connected” to our distribution system.

For these types of customer owned generating systems, East Kentucky Power and its Member Systems do not require customers to obtain authorization. As with LG&E and KU, these systems are most often installed “without utility knowledge.”

Request 13b. How many customers and what amount of such generation do East Kentucky and its Member Systems customers operate and to what extent have East Kentucky and its Member Systems inquired about and/or pursued the potential for having access to this generation at times of peak demand or extreme emergency on its system? Explain the response. If you do not have full knowledge in this area, provide whatever information you have.

Response 13b. Like LG&E and KU, “records do not exist for all the [East Kentucky and its Member Systems’] customers that have open transition switched generation but they include hospitals and medical centers, data and call centers, and other many service critical facilities.”

In only two cases has East Kentucky and its Member Systems pursued the potential for having access to this generation at times of peak demand or extreme emergency on its system. In both instances, the customer approached the utility and requested help designing and integrating a backup generation system. Neither opportunity resulted in utility control of the customers’ generating equipment.

East Kentucky and the Member Systems have not pursued the potential for having access to this generation at times of peak demand or extreme emergency on its system because of the cost of this generation. Though it is unclear how much customer owned backup

generation is available system-wide, the vast majority will be fueled by diesel. Given the extremely high cost of diesel fuel, operating the natural gas fired combustion turbines owned and operated by East Kentucky Power is a far more attractive alternative, financially.

Request 13c. Would East Kentucky and its Member Systems see any value in a voluntary program encouraging these customers (through the provision of bill credits, for example) to utilize this generation voluntarily to meet their needs and free up utility resources during periods of peak demand or extreme emergency? Explain the response. If yes, describe what actions would need to be taken to allow for such a program.

Response 13c. East Kentucky Power and its Member Systems see limited value in a voluntary program encouraging these customers (through the provision of bill credits, for example) to utilize this generation voluntarily to meet their needs and free up utility resources during periods of peak demand or extreme emergency. The cost to produce electricity from customer owned backup systems exceeds the cost to produce by East Kentucky Power as explained in response to 13(b) above. EKPC's combustion turbines are dual fuel, whereby either fuel may be used. To date, natural gas has been the lower cost fuel option.

Though the use of customer owned backup generation can relieve power flow congestion, this benefit is also of limited value to the Member Systems of East Kentucky Power as their distribution systems are generally not congested.

TAB 14

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO SECOND INFORMATION REQUEST**

**COMMISSION STAFF'S SECOND INFORMATION REQUEST DATED 04/13/06
REQUEST 14**

RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 14. Refer to East Kentucky's and its Member Systems' response to Item 1 in the "Interconnection" requests in the Commission's February 24, 2006 Order where East Kentucky and its Member Systems reference interconnection standards and state their belief that it would take a minimum of 2 years for a committee of electric utility representatives to develop statewide interconnection standards.

Request 14a. Describe the interconnection standards developed and utilized by East Kentucky and its Member Systems.

Response 14a. Currently, East Kentucky Power and its Member Systems have three interconnection standards. These are:

1. Requirements for Connection of Generation Facilities to the EKPC Transmission System.
2. Requirements for Facilities Connecting to the EKPC Transmission System.
3. Net Metering interconnections.

Below is the table of contents from the Requirements for Facilities Connecting to the EKPC Transmission System standard developed by East Kentucky Power and its Member Systems. This is for interconnections with non-generating systems.

Table of Contents

1. Introduction
2. Tap connection definition and requirements
3. Looped connection definition and requirements
4. Network connection definition and requirements
5. Voltage levels
6. Power factor requirements
7. Frequency range
8. Power quality
9. Generation
10. Information required
11. Requester's facility equipment
12. System protection
13. Revenue metering and telemetry requirements
14. Communications
15. Inspection requirements
16. Maintenance requirements
17. Coordination with other codes, standards, and agencies
18. Indemnification

Below is the table of contents from Requirements for Connection of Generation Facilities to the EKPC Transmission System interconnection standard developed by East Kentucky Power and its Member Systems.

Table of Contents

1. Introduction
2. Design requirements for connection
3. Requirements for operation
4. Protective relaying
5. Supervisory control and data acquisition
6. Communications
7. Costs incurred
8. Design review
9. Inspection, maintenance, and coordination with other codes, standards, and agencies
10. Final documentation
11. Approval
12. Special provisions
13. Indemnification

The East Kentucky Power Member Systems' interconnection rules for net metering are embedded in each of the net metering tariffs. These tariffs were approved by the KY PSC in 2005.

Request 14b. Do the current interconnection standards differentiate between small generators of 10 MVA and below, and those generators above 10 MVA? Explain the response.

Response 14b. The East Kentucky Power Member Systems' net metering interconnection standard is limited to installations of 10 kW for residential customers and 25 kW for non-residential customers as stated in the Kentucky Net Metering Law. The

other two East Kentucky Power interconnection standards do not differentiate between small generators of 10 MVA and below and those generators above 10 MVA.

Request 14c. Would it still take a minimum of 2 years to develop only an interconnection standard for small generators of 10 MVA and below? Explain the response.

Response 14c. The most effective way for Kentucky to develop a statewide interconnection standard would be to form a committee consisting of representatives from each of the electric utilities serving in the Commonwealth of Kentucky. Because each utility has different operational, equipment, communication, etc. standards, statewide interconnection standards should be developed under a consensus and negotiation effort among all affected utilities.

Developing a statewide interconnection standard under this scenario would require a sizable time commitment by all those involved. The development of the IEEE 1547 interconnection standard, addressing only distributed generation interconnecting with distribution systems, took over four years to complete. The two-year estimate is based on our experience in the IEEE 1547 review, as well as the anticipated magnitude of work and the number of parties involved in this process. EKPC and its Member Systems pledge to devote the necessary level of resources to accomplish this task as expeditiously as possible.

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APR 27 2006

**PUBLIC SERVICE
COMMISSION**

**COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

CONSIDERATION OF THE)	
REQUIREMENTS OF THE FEDERAL)	
ENERGY POLICY ACT OF 2005)	ADMINISTRATIVE
REGARDING TIME-BASED METERING,)	CASE NO. 2006-00045
DEMAND RESPONSE AND)	
INTERCONNECTION SERVICE)	

**RESPONSES TO METRO HUMAN NEEDS ALLIANCE'S
FIRST REQUEST FOR INFORMATION
DATED APRIL 12, 2006**

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS**

PSC ADMINISTRATIVE CASE 2006-00045

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST FOR
INFORMATION DATED APRIL 12, 2006**

East Kentucky Power Cooperative, Inc. (EKPC) and its Member Systems hereby submit responses to the Metro Human Needs Alliance's First Request for Information dated April 12, 2006. Each response with its associated supportive reference material is individually tabbed.

The Member Systems are:

Big Sandy Rural Electric Cooperative Corporation
Blue Grass Energy Cooperative Corporation
Clark Energy Cooperative, Inc.
Cumberland Valley Electric
Farmers Rural Electric Cooperative Corporation
Fleming-Mason Energy Cooperative
Grayson Rural Electric Cooperative Corporation
Inter-County Energy Cooperative Corporation
Jackson Energy Cooperative
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Taylor County Rural Electric Cooperative Corporation

TAB 1

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 1**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 1. Under a critical peak pricing and real time pricing program, as described in the Commission's order of February 24, 2006, how would you notify customers of pricing changes so that they could make adjustments in their usage?

Response 1. For large industrial customers, real-time pricing programs have typically provided information to customers electronically on a day-ahead basis or even an hour-ahead basis. Also, please see the response to PSC-3, Smart Metering of the first data request from Staff.

TAB 2

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 2**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 2. Provide a general discussion of what you perceive to be the pros and cons with respect to low-income utility customers of implementing a smart metering standard in Kentucky.

Response 2. Please see the response to PSC-4, Smart Metering, of the first data request from the Commission Staff as well as the response to PSC-11 of the second data request from the Commission Staff. These responses are applicable to all retail customers (including low-income customers) within the EKPC system. EKPC and its Member Systems encourage the Commission to recognize all current demand-side management efforts as being in conformance with the Smart Metering standard, including home audits provided by Member Systems at no cost to the consumer. The continued availability of cost-free home energy audits to retail cooperative customers is beneficial to all customers within the EKPC system including low-income customers.

TAB 3

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 3**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 3. Please describe any anticipated barriers to participation in time-based rate schedules and/or smart metering programs low-income customers might face.

Response 3. If a voluntary program is offered to all customers, EKPC's Member Systems would ensure that all customers receive the same information about the availability of new time-of-day rate schedules and/or Smart Metering programs. No barrier would exist to prohibit any customer from participating. It would be the customer's choice.

TAB 4

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 4**

**RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems**

Request 4. Provide a description of any formal or informal analysis, discussion or study of the impact of any time based rate schedules and/or smart metering programs on low-income customers you have conducted or of which you are aware. Please describe any conclusions reached and provide copies of any documentation or results of such analysis, discussion or studies.

Response 4. EKPC and its Member Systems have not conducted nor are aware of such studies.

TAB 5

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 5**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 5. Would implementation of smart metering result in higher costs or rates to nonparticipating customers? Please describe any projected costs by category and amount, including any costs of installing, maintaining or reading new meters or other technology, and any systemic or program changes, such as software and billing changes, that you expect to be charged directly (or indirectly by higher rates) to nonparticipating customers.

Response 5. It is our recommendation that all incremental metering costs associated with a new time-of-day rate be borne by participants. The costs of metering and other associated costs are described in the response to PSC-3, Smart Metering, of the Commission's first data request.

TAB 6

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 6**

RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 6. Describe in general the availability of the technology for smart meters, including:

- a. How many suppliers provide smart meters and related technology.
- b. The price range for smart meters.

Response 6. Virtually all commercial revenue meter manufacturers offer smart meters. Therefore, there are a number of smart meter models available. Depending upon complexity and functionality, smart meters range in cost from as little as \$400 to \$4,500 each. See also the response to PSC-3, Smart Metering, of the Commission Staff's first data request.

TAB 7

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 7**

RESPONSIBLE PERSON: Paul A. Dolloff
**COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems**

Request 7. How accurate are the available smart meters? Have these meters been sufficiently tested for accuracy both prior to installation and in actual use?

Response 7. Smart meters are either solid state or microprocessor based, which make for extremely accurate devices. As compared to standard electro-mechanical revenue meters, smart meters remain much more accurate during the life of the unit. All revenue meters must be individually tested prior to installation. The choice of which revenue meter(s) to use is left to the discretion of the utility and approval from the Kentucky Public Service Commission is not required. In addition, utilities must adhere to the meter test standards outlined in 807:KAR 5:041, Sections 13-15 for accuracy requirements.

TAB 8

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 8**

RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 8. How reliable are smart meters? Have any specific maintenance problems been identified?

Response 8. East Kentucky Power and its Member Systems have limited experience with smart meters. The vast majority of residential customers are given standard electro-mechanical revenue meters. Some of our large commercial and industrial customers are given smart meters. Smart meters are either solid state or microprocessor based, which make for a very reliable instrument. East Kentucky has experienced a failure rate of less than one percent for new smart meters. Once installed, smart meter failures are extremely rare. Therefore, special maintenance with regard to smart meters is not necessary.

TAB 9

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 9**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Request 9. Low-income customers are often considered unable to lower energy use because of poor housing stock and/or use of older, inefficient appliances. Would you assist in enhancing or enlarging weatherization programs to help make smart meters an advantage to low-income customers?

Response 9. Customers are able to lower energy consumption by taking advantage of a cost-free home energy audit program offered by the Member Systems that identifies the condition of the housing stock and how customers can make changes to more wisely use energy. In addition, the Member Systems have a number of demand response programs and incentives to improve energy efficiency.

While these programs will help customers lower their energy consumption, it is not as certain that such programs automatically translate into even lower bills under a time-of-day rate alternative. Numerous factors influence whether customers will save money under a time-of-day rate, including the ability to shift load to the off-peak, the rate

differential between on-peak and off-peak periods and whether the incremental cost of new equipment is included in the rate.

TAB 10

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSE TO FIRST REQUEST FOR INFORMATION OF
METRO HUMAN NEEDS ALLIANCE**

**METRO HUMAN NEEDS ALLIANCE'S FIRST REQUEST DATED 4/12/06
REQUEST 10**

**RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems**

Request 10. If you implement time based rate schedules and/or smart metering, would you make any attempt to target any particular types of customers for participation?

Response 10. No, within customer classes, such as the residential class, all customers would have the opportunity to participate. As explained in the response to Item 3 herein, there would be no barriers to entry.